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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,246	01/30/2006	Avshalom Ehrlich	26783	5469
7590 Mark M Friedman Bill Polkinghorn 9003 Florinway Upper Malboro, MD 20772			EXAMINER GAMIL TEJAL	
			ART UNIT 2121	PAPER NUMBER
			MAIL DATE 03/31/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,246

Applicant(s)

EHRlich, AVSHALOM

Examiner

TEJAL J. GAMI

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is responsive to a REQUEST FOR CONTINUED EXAMINATION entered February 10, 2008 for the patent application 10/566246.

Status of Claims

2. Claims 1-14 were rejected in the last Office Action dated October 09, 2007.
- As a response to the October 09, 2007 office action, Applicant has Amended claims 1, 7, 8, 11 and 14; and Added claims 15 and 16.
- Claims 1-16 are now pending in this office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Rahim (U.S. Patent Number: 5,155,683)

As to independent claim 1, Rahim discloses a method to provide feedback to an operator (e.g., feedback loops) of a device (e.g., vehicle) (see Col. 12, Lines 55-64), comprising the steps of:

a) providing a device (e.g., vehicle) having a feedback delay (e.g., a delay is introduced into the feedback loop) (see Col. 2, Lines 3-16);

b) displaying upon at least a portion of a display a first image of a view from said device (e.g., screen image) (see Col. 2, Lines 3-16), said device (e.g., vehicle) being at a first position (e.g., ground position) (see Col. 2, Lines 3-16);

c) issuing a movement command to cause a desired movement of said device to a second position (e.g., operator's commands to the vehicle) (see Col. 2, Lines 3-16);
and

d) displaying a second image of a predicted view from said device at said second position prior to the operator receiving real feedback of said movement command (e.g., vehicle's intended path is displayed) (see Col. 4, Lines 62-63), said second image occupying a portion of said display that is substantially identical to said portion of said display upon which said first image was displayed (e.g., superimposed on the image) (see Col. 4, Line 64), said second image replacing said first image (e.g., replace the old) (see Col. 5, Lines 19-22), said second image including at least a portion of said first image modified according to an operation selected from the group consisting of translation, rotation, magnification and reduction (e.g., zooms, pans or tilts) (see Col. 5, Lines 13-18).

As to independent claim 11, Rahim discloses a feedback system (e.g., feedback loops) for an operator (e.g., operator loop) (see Col. 12, Lines 55-64), comprising:

a) a device (e.g., vehicle) including a camera (e.g., camera 30) (see Col. 6, Lines 55-56);

b) a control arrangement configured for issuing a movement command (e.g., commands to the vehicle) to cause a desired movement of said device from a first position to a second position (e.g., responds to the commands by moving) (see Col. 3, Lines 50-53); and

c) a display (e.g., screen image) (see Col. 2, Lines 3-16) configured for:

i) displaying, upon at least a portion of said display (e.g., screen image), a first image of a view from said device (e.g., vehicle), said device being at a first position (e.g., ground position) (see Col. 2, Lines 3-16); and

ii) displaying a second image prior to the operator receiving real feedback of said movement command (e.g., vehicle's intended path is displayed) (see Col. 4, Lines 62-63), said second image being a predicted view from said device at said second position (e.g., projected path) (see Col. 5, Line 35), said second image being based upon at least part of said first image (e.g., superimposed on the image) (see Col. 4, Line 64), said second image occupying a portion of said display that is substantially identical to said portion of said display upon which said first image was displayed (e.g., superimposed on the image) (see Col. 4, Line 64), said second image replacing said first image (e.g., replace the old) (see Col. 5, Lines 19-22), said second image including at least a portion of said first image modified according to an operation selected from the group consisting of

translation, rotation, magnification and reduction (e.g., zooms, pans or tilts) (see Col. 5, Lines 13-18).

As to dependent claim 2, Rahim teaches the method of claim 1, wherein said second image is based upon at least part of said first image (e.g., superimposed on the image) (see Col. 4, Line 64).

As to dependent claim 3, Rahim teaches the method of claim 2, wherein said second image includes a filler section (e.g., grid) outside of said at least part of said first image (see Figure 3).

As to dependent claim 4, Rahim teaches the method of claim 3, wherein said filler section includes a pattern (e.g., grid) (see Figure 3).

As to dependent claim 5, Rahim teaches the method of claim 4, wherein said filler section includes a repetitive pattern (e.g., grid) (see Figure 3).

As to dependent claim 6, Rahim teaches the method of claim 3, wherein said filler section includes historic image data of said predicted view (e.g., operator sees a frame taken some time ago) (see Col. 5, Lines 28-29).

As to dependent claim 7, Rahim teaches the method of claim 1, further comprising the step of:

e) displaying a third image of an actual view from said device at said second position (e.g., real time images) (see Col. 13, Lines 18-19).

As to dependent claim 8, Rahim teaches the method of claim 1, further comprising the step of:

e) limiting said movement command to ensure that said second image can be based upon at least part of said first image (e.g., relative to ground points, the recalculated path line is superimposed on the screen and the operator can correct the projected vehicle path) (see Col. 5, Lines 30-35).

As to dependent claim 9, Rahim teaches the method of claim 1, wherein said step of issuing said movement command and said step of displaying said second image, occur substantially at the same time (e.g., instantaneous view) (see Col. 5, Lines 23-28).

As to dependent claim 10, Rahim teaches the method of claim 1, wherein said step of displaying said first image is performed by displaying said first image on a screen, said screen having a frame disposed thereon, said first image being disposed substantially within said frame and wherein said step of displaying said second image is performed by displaying said second image on said screen such that, said second image includes substantially all image elements of said first image (e.g., superimposed on the image) (see Col. 4, Line 64).

As to dependent claim 12, Rahim teaches the system of claim 11, wherein said display is further configured for displaying a third image of an actual view from the device at said second position (e.g., real time images) (see Col. 13, Lines 18-19).

As to dependent claim 13, Rahim teaches the method of claim 3, wherein said filler section includes filler image data (e.g., grid) (see Figure 3) and wherein at least a portion of said filler image data is manipulated (e.g., extended) in a manner substantially corresponding to said movement command (e.g., control) (see Col. 5, Lines 1-12).

As to dependent claim 14, Rahim teaches the system of claim 11, wherein said second image is based upon at least part of said first image and wherein said second image includes a filler section outside of said at least part of said first image and wherein said filler section includes filler image data (e.g., grid) (see Figure 3) and wherein at least a portion of said filler image data is manipulated (e.g., extended) in a manner substantially corresponding to said movement command (e.g., control) (see Col. 5, Lines 1-12).

As to dependent claim 15, Rahim teaches the method of claim 1, wherein said device is a vehicle operative to be remotely controlled (e.g., remotely controlled vehicle) (see Col. 4, Line 31; and Col. 6, Lines 51-63).

As to dependent claim 16, Rahim teaches the system of claim 11, wherein said device is a vehicle operative to be remotely controlled (e.g., remotely controlled vehicle) (see Col. 4, Line 31; and Col. 6, Lines 51-63).

Response to Arguments

5. Applicant's arguments filed December 10, 2007 are moot in light of new grounds of rejections.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kanaly (U.S. Patent Number: 4,405,943) teaches low bandwidth closed loop imagery control and communication system for remotely piloted vehicle.

Graham (U.S. Patent Number: 4,682,225) teaches method and apparatus for telemetry adaptive bandwidth compression.

Hinman (U.S. Patent Number: 4,661,849) teaches method and apparatus for providing motion estimation signals for communicating image sequences.

Narendra et al. (U.S. Patent Number: 4,855,822) teaches human engineered remote driving system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tejal J. Gami whose telephone number is (571) 270-1035. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert DeCady/
Supervisory Patent Examiner
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/TJG/